

issue of his third and concluding volume of the 'Ornithology of Peru.' No such important work upon the birds of the Neotropical Region has appeared since Pelzeln's 'Ornithology of Brazil.' We have here the results of the various expeditions of MM. Jelski and Stolzmann, collected in a uniform shape, and combined with those of the many other authors who have treated of Peruvian ornithology.

The number of species to be attributed to the avifauna of Peru, according to M. Taczanowski's researches, is 1349, which, though large when we consider the extent and variety of elevation of the country, is not greater than we might have expected. On turning to the excellent map prepared by M. Stolzmann which accompanies the third volume, and in which the principal localities where collections have been made are indicated, it will be at once manifest how large a part of Peru still remains ornithologically unexplored. There can be no doubt therefore that in the remote Andean valleys rich harvests still remain for future collectors. The following species appear to be described as new in the present volume:—*Picumnus punctifrons*, *Chrysoptilus punctipectus*, *Chamæpetes tschudii*, *Crypturus rubripes*, *Nothoprocta godmani*, and *Rallus peruvianus*.

XXVI.—Letters, Announcements, &c.

We have received the following letters addressed to the Editors of 'The Ibis':—

Shoreham, Ootacamund,
January 27th, 1886.

SIRS,—I have just returned from a trip to Southern Travancore, and I hope very shortly to send you a paper on the birds which I collected there, as well as on a collection made, in September 1884, on the Anamullai Hills.

When in Trivandrum (the capital of Travancore), I was asked to go through the collection of birds in the museum there, and in doing so I came across two specimens of a Laughing-Thrush and two specimens of a Blackbird. The

former were labelled *Trochalopterus cachinnans*, Jerd., the latter *Merula simillima*, Jerd., but I saw at once that they were not of these species, and were to me unknown. I pointed out this to Mr. Harold Ferguson, who was with me, and asked him where the specimens were obtained. The specimens had been purchased, together with a number of other Southern Indian birds, from a native somewhere on the west coast by Mr. Atholl Macgregor, when he was Resident of Travancore ; and this is all that can be definitely ascertained about them ; but Mr. Ferguson has promised to write to Mr. Macgregor for more definite information.

As both species are more nearly allied to Nilgiri forms, it is not improbable that they were obtained on the higher ranges of the Palghat Hills, a portion of the country I have not yet worked, but which I hope to visit later in the year.

The following are descriptions of both species ; I may premise by mentioning that the two specimens of each species are identical one with the other. Both the Blackbirds are, unfortunately, females ; the Laughing-Thrushes are not sexed :—

†
TROCHALOPTERUM CINNAMOMEUM, sp. nov.

Similar to *T. cachinnans*, Jerd., but entirely wanting the black markings of head, face, and chin ; no ash-colour on the posterior portion of the supercilia. Lower parts deep cinnamon-brown ; chin darker.

A broad superciliary stripe from base of nostril to nape, white as far as posterior angle of eye, and from thence gradually shading to ochreous buff ; lores rusty brown ; cheeks and ear-coverts ochreous buff. Chin, fore part of throat, and feathers at base of lower mandible very dark red-brown. Lower parts cinnamon-brown, olivaceous on flanks and lower tail-coverts ; lower wing-coverts and axillaries pale cinnamon-brown, this colour tinging also the inner edges of the primaries ; rest of under surface of primaries hair-brown. Top of head dark hair-brown, slightly tinged with ashy on the nape ; rest of upper parts, including tail, olive-brown, with a hardly perceptible greenish tinge ;

quills hair-brown, with their outer edges olive-brown. Length 8 inches, wing 3·5, tail 3·7, tarsus 1·3, culmen 0·8.

MERULA ERYTHROTIS, sp. nov.

Similar to *M. simillima*, Jerd., but with the feathers at base of upper and lower mandibles, lores, cheeks, and ear-coverts russet-brown; small triangular patch behind the eye naked and coloured yellow.

The two specimens are both apparently females, agreeing exactly in colour, except for the differences noticed above, with adult females of *M. simillima*, with which I have compared them.

One specimen is slightly immature, a few of the wing-coverts showing small triangular buffy patches at their tips; in this specimen the feathers in the angle of the gonyes and a few feathers on the lower throat are tinged with russet-brown.

The skins measure:—Length 9·4, 9·6 inches; wing 4·8, 4·9; tail 4·2; tarsus 1·2; culmen 0·9.

The naked patch behind the eye, which is very distinct in both specimens, renders this species conspicuously different from all the other Blackbirds of Southern India.

I have to thank Mr. Harold Ferguson for allowing me to bring the specimens away with me to describe.

I am,

Yours &c.

WM. DAVISON.

University Museum of Zoology
and Comparative Anatomy,
Cambridge, February 1886.

SIRS,—Being engaged on the continuation of Bronn's 'Klassen und Ordnungen des Thier-reichs, Bd. vi. Abth. iv. Vögel,' which is to contain a general exhaustive account of the anatomy of birds, and a systematic arrangement to be based upon a summary of their structure, I feel the want of various important forms, some of which hitherto it has not been my good fortune to examine. I hope, therefore, that

gentlemen interested in the progress of this work will be able to supply me with specimens of the birds mentioned in the following list :—

Atrichia.	Syrhaptes.
Meliphaginæ, especially	Pterocles.
Moho.	Chionis.
Climacteris.	Glareola.
Trochilidæ.	Opisthocomus.
Chasmorhynchus. *	Eurypyga.
Bucco.	Heliornis.
Trogon.	Psophia.
Batrachostomus.	Cariama.
Centropus.	Dicholophus.
Geococcyx.	Tinamus.
Otidiphaps.	Turnix.
Didunculus.	

It is important that the specimens should be well preserved, which is only possible if they are submerged, in a fresh condition, in good spirit (no matter if the spirit be distilled from figs, alfarroba, potatoes, or grapes), the stronger of course the better.

It is advisable to open the bird's belly by a small slit without injuring the intestines, and to pour some spirit into its throat and gullet. After the birds have remained for a time in one vessel, it will be of great advantage to change the spirit and then firmly to close the jar or bottle by securing the stopper with grease, or bees'-wax (not sealing-wax or any other resin), and by tying a piece of bladder over it.

The preparations made of the specimens sent to the above address will be added to the Collection of the University.

Most important for the purpose stated above are nestlings ; I should therefore feel greatly obliged for well-preserved nestlings of almost any birds, with the exception of the more common European sorts. Especially welcome would be the very young or embryos of *Casuaris*, *Dromæus*, *Apteryx* and *Rhea*, Penguins, *Phænicopterus*, *Procellariinæ*, *Buceros*, *Stringops*.

Yours &c.,

H. GADOW.

SIRS,—In ‘The Ibis’ for January last, p. 89, you express your regret that the “grave error” of charging the Golden Oriole with eating fruits, especially cherries, should have been sanctioned and propagated by one of the new groups of Birds in the British Museum. I should be the very last to cast any aspersion on the character of this old favourite of mine; but I must express it, not as my opinion, but as the result of direct observation, that, in South Germany, Orioles feed freely on ripe sweet cherries. So far as I know, the only way of catching them is by snares baited with cherries, and those which I had alive were so caught. The group to which you take objection was made up from my distinct recollection of the home of a pair of cherry-eating Orioles.

Nevertheless, I should have considered it a grave error to doubt the correctness of observations made in other parts of the country, and was quite prepared to be taught that the Golden Oriole is only locally a cherry-eater. However, on referring to the original statement by your authority, M. Cretté de Palluel, I find that he certainly does not contradict the fact which I intended to represent in that group, but rather that he attempts to prove too much. After having stated that he had captured a great number of Orioles to examine the contents of their stomachs (the greater the pity!), and that he had found them gorged with *noxious* insects, with only a small quantity of fruit in some, he winds up with the following words, which were omitted by you:—“The Oriole does not digest the seeds of the fruits which it eats; it is therefore the natural propagator of fruit-trees, and not their enemy.” As a matter of fact, it is just as well to state that the Golden Oriole does not swallow the stones of the cherries which it eats.

Having before me M. Oustalet’s Report, I was also tempted by your notice of it to read his account of using electricity in the capture of birds, as it seemed to me an extraordinary statement in a report addressed to a Minister of Public Instruction and Fine Arts, who might be supposed to be acquainted with the elements of physical science. I do not think that the procedure, *as described by M. Oustalet*,

would prove to be a successful investment or call for ministerial interference; but *in your version* you have so much improved upon the invention, that the experiment may be safely predicted to end in total failure; and the electric shock on the birds, which are expected to “fall like ripe fruit” from the “dead tree encircled with a band of copper,” would be much less severe in its effects than that which you administered by your account upon the diaphragm of your readers.

Natural History Museum,
Feb. 25, 1886.

A. GÜNTHER.

[The writer of the notice in question does not appear to have made his meaning clear to Dr. Günther. No doubt Golden Orioles do feed, to an extent varying with circumstances, upon ripe cherries, but the idea considered undesirable for propagation was that cherries constituted the *ordinary food* of this species *during the period of incubation*. The only English county in which Golden Orioles have been proved to have nested is Kent, renowned for its cherry-orchards. Suppose that another pair escape the usual fate of a conspicuous species until the cradle-shaped nest is formed: the unsophisticated proprietor of the orchard is pleased to watch the birds whose habits, food, &c. are unknown to him, and he proudly exhibits them to his friends. “Ah!” says one who has studied in the British Museum of Natural History, “those birds won’t leave you a cherry on your trees—why, they just *live* on cherries; I’ve seen them stuffed at the Museum, with the hen bird sitting comfortable on her nest, while the old cock has just brought her two cherries in his bill.” The subsequent action of that Kentish farmer will depend upon his credulity, but it may be imagined! Take a parallel case. There is the greatest difficulty in persuading a gamekeeper to spare a Kestrel, although its value to the farmer is undoubted, mice forming the principal part of its food. It is, however, certain that the Kestrel, when pressed by a clamorous brood, will pick up young Pheasants; but it would be quite

wrong to suppose that game-birds of any kind constitute its ordinary food, whatever ignorant game-preservers may say. Would it not, help to intensify the hatred with which such people regard every "hawk," and would it not "sanction and propagate a grave error," if a group of Kestrels were to be publicly exhibited in our Museum, showing the old birds feeding their nestlings with young Pheasants? It would be as misleading to say that English children (especially those of Norfolk) *feed* on blackberries, and to quote the ballad of "The Babes in the Wood" in proof thereof.—H. S.]

Milton, Co. Halton,
Ontario, Canada,
February 5th, 1886.

SIRS,—The weather here is now severe, 18° below zero this morning, with about a foot of snow over the country, but not a Redpole has come as yet.

I am looking out for the long-expected *Linota hornemanni*. It seems now to be rather a rare straggler here. But even the common *L. linaria* has not put in an appearance this year. Some years they are plentiful, and during others not one is to be seen. It is very strange. A few "Meadow-Larks" (*Sturnella*) have been trying to pass the winter here (the snow did not lie till late in January), but at last they have disappeared, either frozen to death or gone south. It was rather curious to see these summer-birds feeding on horse-dung on the sleigh-tracks. One kept about our stables for a time, generally feeding on the pile of horse-dung outside the door; there it was joined by another, but they have gone at last. Not in a condition to fly far, they must have died. A few Snow-Buntings now and then, generally feeding on the sleigh-tracks, are the only birds to be seen now, except in the woods, where there are a few Woodpeckers and Titmice and Nuthatches. Canada in winter is a most dreary country so far as ornithology is concerned.

There is no doubt whatever, I think, of the excellency of

Linota exilipes as a species, although Mr. Seebohm is unable to comprehend it. How, after seeing them both in life, he could confound them, and write such a careless note on them as he has done in 'Siberia in Europe,' footnote, p. 51, I cannot imagine.

Yours &c.,

W. E. BROOKS.

Science in Indiana.—The Indiana Academy of Science was organized on Dec. 29th, 1885, with the following officers:—D. S. Jordan, M.D., *President*; J. M. Coulter, Ph.D., J. P. D. John, D.D., Rev. D. R. Moore, *Vice-Presidents*; Amos W. Butler, *Secretary*; Prof. O. P. Jenkins, *Treasurer*; J. N. Hurty, *Librarian*. Amos W. Butler was appointed Curator of the department of Ornithology. Mr. Butler read a paper on "The past and present of Indiana Ornithology."

The Abundance of Quails last year.—Lord Walsingham has sent us the following further communication from the Earl of Ducie (see *suprà*, p. 101), dated Mentone, January 12th, 1886:—

"I have procured some definite information respecting the Quails, which tends to explain their appearance in unusual numbers last year. Why they should have been numerous only in Central England I cannot understand.

"A certain Signor Chiappori, of Genoa and Ventimiglia, who shoots along this coast at the time of migration, reports that Quails did not arrive in 1885 until the 11th May. The legal season for shooting them is very brief, lasting only to May 10, a period which generally covers the time of their stay on this coast. They usually arrive April 27. None were therefore killed in this district last spring. He reports further that none bred in Piedmont, where he usually finds plenty in autumn. A few bred along the sea-coast of the Riviera, an exceptional circumstance. He, and others, re-

marked that the Quails last season were smaller than usual, and that many were of a very dark colour."

+ *The Generic Term Simorhynchus.*—Dr. Stejneger, in his article above referred to (*suprà*, p. 201), as Dr. Coues before him, is much exercised at not being able to find where Merrem, in 1819, established the genus "*Simorhynchus*," and begs the assistance of his brother ornithologists in solving this problem. If Dr. Stejneger will turn to Ersch and Gruber's 'Allgemeine Encyclopädie der Wissenschaften und Künste,' vol. ii. p. 405 (1819), under the article "*Alca*," he will find the mysterious genus described as follows:—

"(3) *Starike. Simorhynchus.* Die Stariken, denen wir im Deutschen ihren russischen Namen liessen, gesellte Pallas, durch den allein wir die erste genauere Kenntniss derselben haben, den Alken bei, obgleich er bei einer Art selbst die Unähnlichkeit anerkannte, und sie sich auch von den beiden vorhergehenden Gattungen auffallend unterscheiden. Ihr Schnabel steigt nämlich vorn aufwärts, so dass seine Spitze höher liegt; wie der Mundwinkel, er ist jederzeit glatt und ohne Wachshaut. Ihre Mundöffnung ist klein. Ihre Nasenlöcher liegen von der Stirn entfernt, von einer Erhöhung der Haut eingefasst, welche gewissermassen Nasenlöcherflügel bildet. Ihre Flügel bestehen aus 10 Schwungfedern der ersten und 16 der zweiten Ordnung. Die zweite ist die längste. Ihre Füße sind wie bei den vorigen, und ihr kurzer Schwanz besteht aus 14 Ruderfedern. Man findet sie allein im Meere zwischen Asien und Amerika, und sie legen ein einziges Ei auf die kahlen Felsen."

As species of his genus *Simorhynchus*, Merrem enumerates subsequently (p. 406) *S. cristatus* (= *Alca cristatella*) and (p. 407) *S. psittacula* (= *Alca psittacula*). I presume, therefore, that the former species, as suggested by Dr. Stejneger, may be regarded as the type of *Simorhynchus* of Merrem, leaving *Alca psittacula* to *Cyclorhynchus* of Kaup, for those who are inclined to separate that species generically.—P. L. S.

The Wings of Birds.—Professor Flower, F.R.S., Director of the British Museum of Natural History, gave a lecture on Friday, 19th February, at the Royal Institution, on the Wings of Birds. He said that the power of flying through the air was one of the chief characteristics of the class of birds. Although some members of the other great divisions of the Vertebrata possessed the power in a greater or less degree, they were exceptional forms, whereas in birds the faculty of flight was the rule, its absence the exception. He then pointed out the peculiar modifications of the fore limb of the bird which fitted it for his use as a flying-organ. In the vast majority of existing birds the wing was constructed upon the same essential type down to all the details of the number, arrangement, and structure of the feathers, and of their position in relation to the different bones constituting the skeleton of the wing, which were fully described and illustrated by diagrams. Minor modifications of this type resulted in organs so different in appearance and use as the powerful wings of the Albatross and Swift, which enable their possessors almost to live in the air, and those of the Great Auk and Dodo, too small and feeble to raise the body from the surface of the ground. A totally different type, so far as the arrangement and structure of the feathers are concerned, is seen in the fin-like wings of the Penguins—birds which, on this as well as on other grounds, ought to occupy a far more distinct position in the class than has hitherto been accorded to them. A third type of wing is that of the birds of the Ostrich group, in which the feathers are so imperfectly developed as to make them useless as organs of flight. The question which naturally presents itself with regard to these birds is whether they represent a stage through which all have passed before acquiring perfect wings, or whether they are descendants of birds which had once such wings, but which have become degraded by want of use. In the absence of palæontological evidence it is difficult to decide this point. The complete structure of the bony framework of the Ostrich's wing, with its two distinct claws, rather points to its direct descent from the reptilian hand, without ever having passed

through the stage of a flying-organ. The function of locomotion being entirely performed by the powerfully developed hind legs, and the beak mounted on the long and flexible neck being sufficient for the offices commonly performed by hands, the fore limbs appear to have degenerated in some members of the group, as the Cassowary and Apteryx, to mere rudiments, and to have entirely disappeared in the extinct *Dinornis* of New Zealand, just as the hind limbs of the whales disappeared when their locomotory functions were transferred to the tail. This view is strengthened by the great light that has been thrown on the origin of the wings of flying-birds by the fortunate discovery of the *Archæopteryx* in the Solenhofen beds of Jurassic age, as in this most remarkable animal, half lizard and half bird, the process of modification from hand to perfect flying-wing is clearly demonstrated. The lecturer mentioned, in conclusion, that specimens showing the structure of the principal forms of the wings of birds were being prepared for exhibition in the Natural History Museum, Cromwell Road.

The British Association Migration Committee.—We have from time to time drawn attention to the inadequate support given to the Committee for reporting on the Migration of Birds, and we have contrasted the sum which it receives from a semi-private source (£30) with the £1000 accorded, merely as a commencement, by the United States Government for a similar purpose. We now publish the following appeal :—

Great Cotes, Ulceby, Lincolnshire,
February 1st, 1886.

Migration of Birds.

DEAR SIR,—You are doubtless aware that in 1880 a Committee was appointed by the British Association for the purpose of collecting observations on the Migration of Birds at Lighthouses and Lightships, and that this Committee has since been annually reappointed by the same Association, which in 1882 granted £15, in 1883 and 1884 £20, and in

1885 £30 in aid of the expenses incidental to the enquiry. Six reports have already been issued by the Committee, and a seventh is now in course of preparation.

About 200 stations on the coasts of Great Britain and Ireland, and the outlying islands, as well as several foreign stations, are annually supplied with letters of instruction and printed schedules for registering the occurrence of birds.

The work of distributing these circulars, the constant correspondence with the observers, the tabulation and recording of each separate entry and subsequent writing of the report entail a great amount of labour, and from the increasing interest taken in the enquiry, as indicated by the number of well-filled schedules sent in, there is every prospect of the work being much heavier in the future.

It is highly desirable that the observers should be supplied with some means of forwarding the wings and feet of any birds killed against the lanterns of the lighthouses and light-ships, as well as small specimens entire. Unless this is systematically done, no really accurate results of the species on migration can be arrived at.

Unfortunately, the funds at the disposal of the Committee are totally inadequate to meet the annually increasing and heavy demands made upon it, and in the last year the expenditure amounted to £74 13s. 10d., the receipts (including the Grant made by the British Association) to £36 10s. 0d., leaving a balance of £38 3s. 10d. to be made good by the members of the Committee.

On these grounds, therefore, Donations or Annual Subscriptions are earnestly invited from those taking an interest in the subject. Should you be inclined to contribute to the funds of the Committee, I shall be glad if you will fill up and return to me the enclosed form, or otherwise intimate your intention to me at your earliest convenience.

I am, dear Sir,

Faithfully yours,

JOHN CORDEAUX,

Secretary to the Committee.

+ *Habits of the Rufous-backed Humming-bird* (*Selasphorus rufus*).—In the last Part of 'The Auk' (pp. 76-77), Mr. H. W. Henshaw gives the following interesting account of this beautiful species, as observed by him in mountains about forty miles east of Santa Fé, New Mexico :—

"The number of representatives of this and the preceding species that make their summer homes in these mountains is simply beyond calculation. No one whose experience is limited to the Eastern United States can form any adequate idea of their abundance. They occur from an altitude of about 7500 feet far up on the mountain sides, as high up, in fact, as suitable flowers afford them the means of subsistence. They are most numerous at an altitude of from 8000 to 9000 feet. During the entire summer they frequent almost exclusively a species of *Scrophularia* which grows in clumps in the sunnier spots of the valleys. From early dawn till dusk the Humming-birds throng around these plants intent on surfeiting themselves with honey and the minute insects that the honey attracts. The scene presented in one of these flowering areas is a most attractive one. Males and females all flock to the common feeding-ground, and as the Hummers, especially the Rufous-backed species, are pugnacious and hot-tempered in the extreme, the field becomes a constant battleground whereon favourite flowers and favourite perching-grounds are contested for with all the ardour that attaches to more important conquests. The fiery red throat of the Rufous-backed Hummer is an index of its impetuous, aggressive disposition; and when brought into conflict with the other species it invariably asserts its supremacy and drives its rival in utter route from the fields. Nor do the males of this species confine their warfare to their own sex. Gallantry has no place, apparently, in their breasts, and when conquest has put them in possession of a perch near a clump of flowers they wage war on all fresh comers, females as well as males.

"Some idea of the number of Humming-birds in this locality—and in this respect this whole mountain area is alike—may be gained from the statement that in a single clump of the *Scrophularia* I have counted eighteen Hummers, all within

reach of an ordinary fishing-rod. There was scarcely a moment in the day when upwards of fifty could not be counted within the area of a few yards in any of the patches of this common plant."

New Birds from Celebes.—In an account of a meeting of the Verein für Naturwissenschaft of Brunswick, held on the 18th February last, published in the 'Braunschweigische Anzeiger' for March 3rd, which Dr. W. Blasius has kindly forwarded, will be found short characters of the two new birds from Celebes, named *Dicaeum nehrkorni* and *Rallus plateni*. The specimens thus described formed part of a large collection made by Dr. Platen at Rurukan, in Northern Celebes, in 1884 and 1885, of which, no doubt, a fuller account will ultimately be given.

New and Recent Expeditions.—Mr. G. C. Bourne has returned safely from his visit to Diego Garcia, and amongst his spoils has brought back a collection of birds, comprising representatives of about 15 species. These are all Waders and Sea-birds with the exception of a single Weaver-bird, apparently *Foudia madagascariensis*, which has been no doubt imported from Mauritius. Mr. Bourne will read a report on his birds at one of the approaching meetings of the Zoological Society of London.

Mr. Henry J. Elwes has received the appointment of Naturalist to the Embassy which is about to proceed to Lhasa with the object of opening Tibet to the trade of India. There can be no doubt that in this instance at least we have the right man in the right place. Mr. Elwes's well-known energy and intimate acquaintance with the fauna of Darjeeling alike render him in every way fitted for this arduous post, and all the fraternity of the B.O.U. will, we are sure, join us in wishing him success in his somewhat hazardous journey. Mr. Elwes will leave England very shortly for Darjeeling, whence the Expedition will start in the early part of the summer.